

- a) an elongated tool body having an upper end portion and a lower end portion, and a longitudinal flow bore that enables fluid to flow through the tool body from the upper end to the lower end;
- b) an upper piston mounted at the upper end portion of the tool body, movable between upper and lower positions and having a valve seat;
- c) a lower piston mounted below the upper piston, movable between upper and lower positions and having a valve seat;
- d) a first valving member for sealing the valve seat of the upper piston so that hydrostatic pressure can build up above the upper piston;
- e) a second valving member disposed in between the upper and lower piston and having a lower valving end portion that forms a [seat] seal with the lower piston valve seat, the second valving member being movable downwardly in the tool body bore responsive to a pressure increase above the upper piston;
- f) a trip mechanism for separating the second valving member from the lower piston valve seat when a predetermined pressure value is overcome;
- g) a return mechanism for returning the [first] <u>lower</u> piston to its upper position when the trip mechanism separates the second valving member from the lower piston <u>valve</u> seat; and
- h) wherein the tool body has an anvil portion positioned above the lower piston for receiving force from the lower piston when it is returned to its upper position by the return mechanism.





6.(Amended) The jar apparatus of claim 5 wherein the tappet and upper piston are separately movable members, and a seat interface is provided at the interface between the bottom of the upper piston [at] and top of the tappet.

03

14.(Amended) The jar apparatus of claim 1 wherein the <u>second</u> valving member is preliminarily secured to the tool body with one or more shear pins that shear as hydrostatic fluid pressure is increased.

A

- 15.(Amended) A downhole jar apparatus for use in oil and gas wells, comprising:
- a) an elongated tool body supportable by a work string and having an upper end portion and a lower end portion, and a longitudinal flow bore that enables pressurized fluid to flow through the tool body from the upper end to the lower end;
- b) an upper piston mounted at the upper end portion of the tool body, movable between upper and lower positions and having a valve seat;
- c) a lower piston mounted below the upper piston, movable between upper and lower positions in the tool body and having a valve seat;
- d) a first valving member for sealing the valve seat of the upper piston so that pressurized fluid can build hydrostatic pressure above the first valving member and upper piston;
- e) wherein the upper piston is an assembly that includes an upper piston member and a tappet that carries the upper piston <u>valve</u> seat, the tappet and upper piston member being separable members that move downwardly together when the first valving member seals upon the valve seat of the upper piston assembly;
- f) a second valving member disposed in between the upper and lower pistons and having a lower valving end portion that forms a [seat] seal with the lower piston valve seat;
- g) a trip mechanism for separating the second valving member from the lower piston valve seat when a predetermined pressure value in the tool body flow bore above the upper piston and first valving member is overcome;
- h) a return mechanism for returning the [first] <u>lower</u> piston to its upper position when the trip mechanism separates the second valving member from the lower piston valve seat; and
- i) wherein the tool body has an anvil portion positioned above the lower piston for receiving force from the lower piston when it is returned to its upper position by the return mechanism.





16.(Amended) A downhole jar apparatus for use in oil and gas wells, comprising:

- a) an elongated tool body supportable by a work string and having an upper end portion and a lower end portion, and a longitudinal flow bore that enables pressurized fluid to flow through the tool body from the upper end to the lower end;
- b) an upper piston mounted at the upper end portion of the tool body, movable between upper and lower positions and having a valve seat;
- c) a lower piston mounted below the upper piston, movable between upper and lower positions in the tool body and having a valve seat;
- d) a first valving member for sealing the valve seat of the upper piston so that pressurized fluid can build hydrostatic pressure above the first valving member and upper piston;
- e) a second valving member disposed in between the upper and lower pistons and having a lower valving end portion that forms a [seat] seal with the lower piston valve seat;
- f) a trip mechanism for separating the second valving member from the lower piston valve seat when a predetermined pressure value in the tool body flow bore above the upper piston and first valving member is overcome;
- g) a return mechanism for returning the [first] <u>lower</u> piston to its upper position when the trip mechanism separates the second valving member from the lower piston <u>valve</u> seat; and
- h) an anvil carried by the tool body for receiving blows from the lower piston when the lower piston travels upwardly in the tool body.

